

City of Sunnyvale
SUMMARY WORKSHEET
2005 Proposed Study Issues

DEPARTMENT OF Information Technology

Item #	Study Issue Title	Hours (Includes hours from departments and consultants)	OCA Hours	Staff Recommendation				B/C Rankings (Identify name of B/C below)			
				For Study	No Rec.	Defer	Against				
CONTINUING ITEMS											
	None										
NEW ITEMS											
ITD-1	Additional Technologies to Broadcast Meetings	268	24			X					
ITD-2	Feasibility of City Providing Wireless Services in the Downtown Area	388	40		X						
ITD-3	Wireless Services at City Hall and the Library	204	20				X				
DEFERRED/BELOW THE LINE IN 2004											
	None										

PROPOSED COUNCIL STUDY ISSUEFor Calendar Year: 2005New X

Previous Year (below line/defer) _____

Issue: Additional Technologies to Broadcast MeetingsLead Department: Information TechnologyGeneral Plan Element or Sub-Element: Community Sub-Element Policy 7.2A.4**1. What are the key elements of the issue? What precipitated it?**

Currently, live City Council meetings are broadcast over Comcast government access Channel 15-KSUN limiting viewers to only those who reside within the City of Sunnyvale and who subscribe to Comcast cable television services. There are other technologies available to deliver live broadcast meetings. Satellite carriers such as DirectTV and Dish now compete with cable companies to provide television services. Several cities webcast live Council meetings, which would enable people who work or own businesses in Sunnyvale but reside in other communities to view and/or listen to meetings in which topics of interest are discussed. Some cities also use a low-band AM radio station to deliver an audio broadcast of the live meetings.

The study would focus on the feasibility of establishing an alternate method to deliver live broadcast meeting coverage to viewers and/or listeners. The City currently has a franchise agreement with Comcast that expires in December 2005. As part of that agreement, Comcast provides the government access channel over which live meetings are now broadcast. The study issue would focus on whether it is practical to contract with a satellite carrier and what type of equipment, licensing and ongoing operating costs are required. Equipment and software as well as ongoing operating costs will also be needed to webcast meetings. Use of an AM radio station will require equipment and an application to the Federal Communications Commission (FCC) for a frequency over which to broadcast audio of live meetings. These frequencies are limited and often are good for only a 3 to 5 mile radius. In addition, the IT Department and the Communications Division of the Office of the City Manager are reviewing the options to replace the playback equipment and bulletin board system for Channel 15-KSUN as well as replace outdated equipment in the cable TV control room behind the Council Chambers. The scope of the study issue may include how an alternate source can be integrated with these other system components, which will add some complexity to the study.

A survey of surrounding communities will be completed to identify how other agencies are delivering live broadcasts using other types of technology. It is very difficult to determine the best method to provide information to the community. It is

possible that a survey of the community may need to be conducted to determine how best to provide an alternate method of delivering live broadcasts. In this case, an outside firm may be required to assist in conducting the survey.

The Information Technology Department, who is the lead department, has limited staffing resources as a result of budget reductions made in FY 2003-2004. The study will identify what the impact of providing and maintaining new broadcasting services will be on existing IT resources. There will also be an impact on the Communications Division of the Office of the City Manager. Ongoing support by City staff will be needed to monitor whatever alternate source is used to broadcast during live meetings and to resolve any problems as well as provide continuous programming when live meetings are not being held.

The completion of the study will impact the Information Technology Department in that limited staffing resources will be diverted from providing existing services to conducting the study.

2. How does this relate to the General Plan or existing City Policy?

Community Participation Sub-Element Policy 7.2A.4 – Identify communications media and telecommunications technology that are appropriate and cost effective to provide information to and access for the community.

Telecommunications Policy Goal C – Use telecommunications to maintain and enhance information resources and services provided to Sunnyvale citizens.

3. Origin of issue:

Council Member(s): Otto Lee

General Plan: _____

City Staff: _____

Board or Commission (identify name of the advisory body from the list below): _____

(Arts, Building of Code Appeals, BPAC, Child Care, Heritage, Housing and Human Services, Library, Parks and Recreation, Personnel and Planning)

Board or Commission ranked this study issue _____ **of** _____

Board or Commission ranking comments:

4. Multiple Year Project? Yes _____ No X **Expected Year Completed** 2005

5. Estimated work hours for completion of the study issue (use 5 or 8-hour increments):

(a) Estimated work hours from the lead department 200 Hours

(b) Estimated work hours from consultant(s) if applicable: _____

(c) Estimated work hours from the City Attorney's Office: 24 Hours

(d) Estimated work hours from Finance: 20 Hours

(e) Estimated work hours from other department(s):

Department: Office of the City Manager 48 Hours

Department: _____

Department: _____

Total Estimated Hours: 292 Hours

6. Expected participation involved in the study issue process?

(a) Does Council need to approve a work plan? Yes ___ No X

(b) Does this issue require review by a Board/Commission? If so, please list below: Yes ___ No X

(c) Is a Council Study Session anticipated? Yes ___ No X

(d) What is the public participation process?

Surveys, if conducted.

7. Cost of Study: Please mark appropriate item below.

X Costs covered in operating budget - 764 – IT Services Delivery

___ Costs covered by project - <project name>

X Budget modification needed for study - \$20,000.00

Explain below what the additional funding will be used for:

Additional funding will be used to conduct a resident survey, if Council directs staff to do so as part of the study. Consultant may also be required to assist in the evaluation of other technologies and their related costs to deliver broadcasts of meetings.

8. Potential fiscal impact to implement recommendations in the Study approved by Council, if any:

Mark a range for the items below:	\$500 or none	\$50K or less	\$51K - \$100K	\$101K - \$500K	\$501K or more
Capital expenditure range			X		
Operating expenditure range		X			
New revenues/savings range	X				

Explain impact briefly:

One-time purchase costs will be needed for equipment, licensing and other items. If an alternate technology is implemented, there will be new operating costs associated with maintaining and managing the technology by the IT Department and the Communications Division of the OCM.

9. Staff Recommendation for this calendar year:

"For" Study ___ **Explain:**

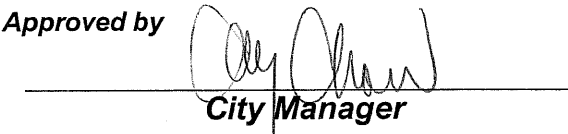
"Against" Study X **Explain.** If staff suggests that this study should not be considered again in the future or deferred at this time, please include this in your explanation: Staff recommends that this study be deferred to 2006. There are limited IT Department staffing resources to conduct the study in 2005. In addition, the IT Department and Office of the City Manager-Communications Division are working on a project to replace the existing analog technology that is used to broadcast live meetings over the Comcast cable TV system. This outdated analog equipment should be replaced before a study is completed to determine what type(s) of additional technology would be appropriate to complement the cable TV broadcast.

No Recommendation ___

Note: If staff's recommendation is "for study" or "against study", the Director should note the relative importance of this Study to other major projects that the department is currently working on or that are soon to begin, and the impact on existing services/priorities.

Reviewed by 
Department Director

11/13/04
Date

Approved by 
City Manager

11/9/04
Date

PROPOSED COUNCIL STUDY ISSUEFor Calendar Year: 2005New X

Previous Year (below line/defer) _____

Issue: Feasibility of the City Providing Wireless Services in the Downtown Area**Lead Department:** Information Technology**General Plan Element or Sub-Element:** Community Participation Sub-Element Policy
7.2A.4**1. What are the key elements of the issue? What precipitated it?**

Some cities are providing wireless services to their communities in an effort to make sure that as many individuals as possible have equal access to the Internet for free or at an affordable rate. Providing wireless services in downtown would also be an economic development tool. In September 2004, Philadelphia officials announced a \$10 million plan to install wireless hot spots throughout 135 square miles of the city by placing cells on street lights and other devices. The City of San Mateo operates a wireless network in the central part of the city for the Police Department so that officers can access databases from their car laptops. In St. Cloud, Florida, residents and visitors can surf the web for free using a wireless network created by the city that covers a 12 block square downtown. Long Beach began offering free wireless Internet access in January 2003 in a 4 block downtown area.

The study issue would address the feasibility of the City contracting with an Internet service provider to deliver wireless services to the downtown area or providing the services through the City's network infrastructure. The study will identify the advantages and disadvantages for the City's involvement in creating hot spots, or hot zones, in the downtown area or whether the responsibility for providing wireless services in the downtown area should rest with the individual businesses; i.e., they would contract with a service provider to provide Internet services at their respective business site over which the City has no interest or control. If the City constructs the infrastructure, network equipment including wireless access points and antennae are required in the downtown area and the study will determine the capability of the City to provide ongoing maintenance of the wireless network. The study will also address the potential legal ramifications or liability for the City providing Internet services to the public.

Determination will need to be made as to whether the City's existing Internet service provider will be used for these wireless services or a separate service provider will need to be selected. Several wireless service providers have contacted the City about establishing hot spots. The study issue will review

possible criteria that the City would use in a competitive bidding process to select an appropriate provider of wireless services to the downtown area. In addition, the study will examine whether it's feasible to include the provision of wireless services as a negotiating point with Comcast during the franchise renewal process.

The study should also include review of the City's franchise requirements; i.e., any telecommunications company who provides services using the City public right-of-way must enter into a franchise agreement and pay the City a "reasonable compensation" for such usage. In fact, the IT Department is currently working with MetroFi on a franchise agreement to install devices on City-owned streetlight poles and traffic lights. It's possible that an agreement may be reached with MetroFi to provide wireless services for City purposes. In addition, the City recently entered into an agreement for a temporary encroachment permit with Tropos Networks, a Sunnyvale firm that manufactures mesh technology, to install their devices on 6 streetlight poles around their facility for testing purposes. Tropos is another potential vendor who could provide wireless hot spots for the City.

The proposed study should also include review of the City's existing zoning regulations in Chapter 19.70, "Wireless Telecommunication Facilities", in the Sunnyvale Municipal Code. The Code contains provisions for wireless telecommunications facilities; however, when the Code was written in 1997, its intent was primarily directed to cellular services. Today, wireless hot spots and mesh networks are new technologies used to deliver Internet services and require further study on how best to regulate installation throughout the community.

The study will require a consulting expert in wireless technologies as well as a comprehensive review of other cities' approaches to implementing wireless networks in the respective communities.

It will also be essential to consider the needs of the downtown business owners. Some restaurant owners may not be interested in patrons occupying tables to surf the Internet; however, other owners may want customers to linger to consume more food and beverages.

2. How does this relate to the General Plan or existing City Policy?

In January 1996, the City adopted a Telecommunications Policy, which is the driving document containing goals, policies and action statements for achieving universal access for Sunnyvale citizens and businesses at competitive, affordable prices. One of its goals is to "promote use of telecommunications technology, where appropriate and within the scope of available resources, to enhance the economic vitality of Sunnyvale."

Community Participation Sub-Element Policy 7.2A.4 – Identify communications media and telecommunications technology that are appropriate and cost effective to provide information to and access for the community.

3. Origin of issue:

Council Member(s): Melinda Hamilton, Otto Lee

General Plan: _____

City Staff: _____

Board or Commission (identify name of the advisory body from the list below): _____

(Arts, Building of Code Appeals, BPAC, Child Care, Heritage, Housing and Human Services, Library, Parks and Recreation, Personnel and Planning)

Board or Commission ranked this study issue _____ **of** _____

Board or Commission ranking comments:

4. Multiple Year Project? Yes___ **No** **X** **Expected Year Completed** 2005

5. Estimated work hours for completion of the study issue (use 5 or 8-hour increments):

(a) Estimated work hours from the lead department 160 Hours

(b) Estimated work hours from consultant(s) if applicable: 40 Hours

(c) Estimated work hours from the City Attorney's Office: 40 Hours

(d) Estimated work hours from Finance: 30 Hours

(e) Estimated work hours from other department(s):

Department: Community Development 150 Hours

Department: Public Works 8 Hours

Department: _____

Total Estimated Hours: 428 Hours

6. Expected participation involved in the study issue process?

(a) Does Council need to approve a work plan? Yes ___ No ___

(b) Does this issue require review by a Board/Commission? If so, please list below: Yes X No ___Planning Commission(c) Is a Council Study Session anticipated? Yes X No ___

(d) What is the public participation process?

Meetings with downtown businesses.

7. Cost of Study: Please mark appropriate item below.X Costs covered in operating budget – 764 – IT Services Delivery___ Costs covered by project - <project name>X Budget modification needed for study - \$10,000**Explain below what the additional funding will be used for:**

An expert consultant in wireless technologies to review other cities' approaches to installing services throughout their communities and to review the existing zoning regulations as they apply to wireless hot spots and mesh networks.

8. Potential fiscal impact to implement recommendations in the Study**approved by Council, if any:**

Mark a range for the items below:	\$500 or none	\$50K or less	\$51K - \$100K	\$101K - \$500K	\$501K or more
Capital expenditure range		X			
Operating expenditure range		X			
New revenues/savings range	X				

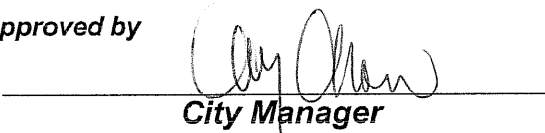
Explain impact briefly: If Council elects to provide wireless services to the downtown area, there will be one-time costs to implement a comprehensive network as well as ongoing operating costs to manage and maintain the network and to pay for the Internet service provider. The Public Works Department may be the ones responsible for maintaining the devices so there will be ongoing operating costs. If the City provides the wireless services to the downtown area, there will be significant impact on the staffing resources of the IT Department to maintain the hot spots and with the position reductions made in FY 2003-2004, it is highly likely that existing service levels already adjusted will need to be reviewed and adjusted accordingly resulting in even longer response times to customers' requests. If the City contracts with a wireless carrier to provide the hot spots, IT staffing resources will be required to manage the contract.

9. Staff Recommendation for this calendar year:**“For” Study Explain:****“Against” Study Explain. If staff suggests that this study should not be considered again in the future or deferred at this time, please include this in your explanation:****No Recommendation X**

Note: If staff's recommendation is “for study” or “against study”, the Director should note the relative importance of this Study to other major projects that the department is currently working on or that are soon to begin, and the impact on existing services/priorities.

Reviewed by
Department Director

11/3/04

Date**Approved by**
City Manager

11/9/04

Date

PROPOSED COUNCIL STUDY ISSUEFor Calendar Year: 2005New X

Previous Year (below line/defer) _____

Issue: Wireless Services at City Hall and the Library**Lead Department:** Information Technology**General Plan Element or Sub-Element:** Community Participation Sub-Element Policy 7.2A.4**1. What are the key elements of the issue? What precipitated it?**

More and more cities are providing wireless services at City facilities for visitors to access the Internet. The Information Technology Department and the Department of Libraries have already discussed the provision of wireless services at the Main Library. In fact, wireless access points are expected to be installed after the Library's automated circulation system is implemented in 2005. (Council awarded a contract to Innovative Interfaces Inc. on 8/24/04.) This study issue would continue that review and include the City Hall as another possible hot spot.

The study will review whether the hot spots will be provided through the City's network infrastructure or whether they will be contracted to an Internet service provider. There are security concerns with providing the wireless services through the City's network that will need to be addressed including segregating the public users from City users. There are also limitations with bandwidth and speed; i.e., the more people using a single wireless access point will result in a less responsive and slower network access. The study will address whether the service should be free or at a charge to the public and how users are authenticated (using their library card) and identify what additional IT resources will be needed to support the wireless networks. The study will also include a review of other cities and how they approach the provision of wireless services in City facilities and identify any potential legal ramifications or liability for the City providing Internet services to the public.

2. How does this relate to the General Plan or existing City Policy?

In June 1996, the City adopted a Telecommunications Policy, which is the driving document containing goals, policies and action statements for achieving universal access for Sunnyvale citizens and businesses at competitive, affordable prices. One of its goals is to "use telecommunications to maintain and enhance information resources and services provided to Sunnyvale citizens."

Community Participation Sub-Element Policy 7.2A.4 – Identify communications media and telecommunications technology that are appropriate and cost effective to provide information to and access for the community.

3. Origin of issue:

Council Member(s): Melinda Hamilton, Otto Lee

General Plan: _____

City Staff: _____

Board or Commission (identify name of the advisory body from the list below): _____

(Arts, Building of Code Appeals, BPAC, Child Care, Heritage, Housing and Human Services, Library, Parks and Recreation, Personnel and Planning)

Board or Commission ranked this study issue _____ of _____

Board or Commission ranking comments:

4. Multiple Year Project? Yes ___ No X Expected Year Completed 2005

5. Estimated work hours for completion of the study issue (use 5 or 8-hour increments):

(a) Estimated work hours from the lead department 120 Hours(b) Estimated work hours from consultant(s) if applicable: 40 Hours(c) Estimated work hours from the City Attorney's Office: 20 Hours(d) Estimated work hours from Finance: 20 Hours

(e) Estimated work hours from other department(s):

Department: Libraries 24 Hours

Department: _____

Department: _____

Total Estimated Hours: 224 Hours

6. Expected participation involved in the study issue process?

(a) Does Council need to approve a work plan? Yes ___ No X(b) Does this issue require review by a Board/Commission? If so, please list below: Yes ___ No X

(c) Is a Council Study Session anticipated?

Yes___ No X

(d) What is the public participation process?

Public Hearing when RTC is presented.

7. Cost of Study: Please mark appropriate item below.X Costs covered in operating budget – 764 – IT Services Delivery

___ Costs covered by project - <project name>

X Budget modification needed for study - \$10,000**Explain below what the additional funding will be used for:**

An outside expert will be hired to review the proposed wireless network to ensure the appropriate equipment is purchased and that the proper security components are configured.

8. Potential fiscal impact to implement recommendations in the Study

approved by Council, if any:

Mark a range for the items below:	\$500 or none	\$50K or less	\$51K - \$100K	\$101K - \$500K	\$501K or more
Capital expenditure range		X			
Operating expenditure range		X			
New revenues/savings range	X				

Explain impact briefly:

The one-time purchase estimate obtained in 2003 to provide 4 wireless access points at the Library though the City's network was \$23,150 and is budgeted in the Library replacement system project. There is no existing funding to purchase equipment to install wireless hot spots in City facilities other than the Library. There will be significant impact on the IT Department staffing resources to maintain the wireless networks at City Hall and Library. With the position reductions made in FY 2003-2004, it is highly likely that existing services levels that were already adjusted as a result of the budget reductions will need to be reviewed and adjusted again resulting in an even longer response time to customers' requests.

9. Staff Recommendation for this calendar year:**"For" Study ___ Explain:**

"Against" Study X Explain. If staff suggests that this study should not be considered again in the future or deferred at this time, please include this in your explanation: Staff is already planning to implement a wireless network at the Library. After that wireless network is implemented, an assessment can be made regarding the impact on the IT staffing resources for maintaining the wireless network. Depending on that assessment, staff may decide to proceed with the additional hot spot(s) at City Hall, which would be dependent on availability of capital funding. In addition, IT recently began the implementation of the replacement Library system and is continuing the implementation of the HR/Payroll upgrade. Staff will also begin the upgrade of the Public Safety CAD/RMS systems in Spring 2005. Resources to study this issue will be diverted from implementing these projects and from completing ongoing operational tasks already stretching the IT staffing resources.

No Recommendation ___

Note: If staff's recommendation is "for study" or "against study", the Director should note the relative importance of this Study to other major projects that the department is currently working on or that are soon to begin, and the impact on existing services/priorities.

Reviewed by


Department Director11/3/04
Date

Approved by


City Manager11/9/04
Date